

Self-Paced Workshop: Intermediate GIS II

Course Objectives

This is an intermediate course on theories and application of GIS techniques for spatial analysis. Each student who successfully completes this course will have developed working knowledge and skills necessary to process GIS data and conduct simple spatial analysis. Students will be introduced to the concept of and will have hands-on experience with preparing data (including GPS) for GIS analysis, suitability analysis and damage assessment methodologies. This workshop assumes at least Beginner GIS knowledge. If you are not sure if you qualify, please read the Beginner GIS information to see if you are comfortable with those topics first.

Self-Paced Workshop

This is a **self-paced** course, therefore the student is responsible for taking full advantage of the materials they will be sent (CD of data and PDF of Workbook). If a Certificate of Completion is desired, the student will be required to submit *.jpgs of certain exercises in a timely manner to our staff as proof of progress. There is no lecture for this workshop and no meetings; everything is on your own using the materials provided.

TOPICS COVERED

- **Advanced Habitat Suitability Model**
 - Exercise Introduction
 - Build the folder structure and geodatabases for the lynx project
 - Create a Custom Toolbox
 - Add Source Data to a Project Database
 - Get Your Data into Shape
 - Work with ModelBuilder
 - Create a Submodel

- **More on Spatial Analysis**
 - Zonal Statistics, Cross Tabulation, and Neighborhood Statistics

- **Introduction to Topology**
 - Create a Topology
 - Modify a Topology
 - Manage Multiple Topologies
 - Examining Topology Errors in ArcMap
 - Use Predefined Fixes to Correct Errors
 - Correct Pseudonode Errors with Predefined Fixes
 - Using Topology Editing Tools to Correct Point Errors

➤ **Network Analysis**

- Find the Shortest Path
- Find the Fastest Path
- Interactively restrict the path of a trace
- Restrict the Path of a trace using a weight filter
- Build and Edit a Geometric Network

<i>What Is Unique About Self-Paced Workshops?</i>	
Instructor-Led Workshop	Self-Paced Workshop
On 9am-4pm schedule	On your schedule
On-site (USF St. Petersburg)	At your location of choice
Instructor available in class	Assistance available via email/phone
Certificate of Completion at end of course	Certificate of Completion at end of course upon submission of *.jpgs
Use lab computers with software and data pre-installed	Install data on your computer and 180-day trial version of ArcGIS (with extensions)

Contact Us

Dr. Barnali Dixon / Julie Earls
140 7th Ave. South
(Geo-Spatial Analytics Lab –DAV 206)
University of South Florida St. Petersburg
St. Petersburg, FL 33701
Phone (727) 873-4025
E-mail: [Barnali Dixon](mailto:bdixon@mail.usf.edu) bdixon@mail.usf.edu